Cheung, Wendy

From: pat obrien <pwob@comcast.net>
Sent: Thursday, May 4, 2017 10:35 AM

To: Cheung, Wendy **Subject:** [SPAM] RE: ECCV DI-2

Wendy,

I just wanted to reiterate that am going over the options you discussed below to try and anticipate what we would need to do if the Dakota is actually a USDW.

In my opinion and ECCV's and API, the Dakota is not a USDW. We would like to present all the evidence for this opinion in our meeting to come.

POB

From: Cheung, Wendy [mailto:Cheung.Wendy@epa.gov]

Sent: Thursday, May 04, 2017 9:24 AM

To: pat obrien **Subject:** ECCV DI-2

Great, I think this has the greatest likelihood of getting the achieved outcome at the least cost (short term and long term). If the MI tests were to fail (option 2), you're still back to square one. And I am not confident that it'll pass.

I would go with a much larger squeeze zone, unless you have great confidence that it will get you that 80% of continuous cement, I can't imagine incrementally it'll cost that much more. The number of perfs made into the pipe won't change and in fact the cement will give the well greater integrity. As we discussed yesterday, although DI-I didn't have the continuous 80% bond, I was able to find a number of sections that when added together was greater than the required continuous section.

Do you have a sense when you can get this work done?

From: pat obrien [mailto:pwob@comcast.net]

Sent: Thursday, May 4, 2017 9:03 AM

To: Cheung, Wendy < Cheung. Wendy@epa.gov>

Subject: [SPAM] RE: ECCV DI-2

Thanks Wendy,

If we go with option 1, I assume we will need to run a cement bond log across the squeezed zone, correct?

I was thinking a 40 foot squeeze zone, OK with you?

If the cement bond logs shows good cement, then we are done?

POB

From: Cheung, Wendy [mailto:Cheung.Wendy@epa.gov]

Sent: Wednesday, May 03, 2017 4:24 PM

To: pat obrien **Subject:** ECCV DI-2

Pat,

Per our conversation, here are some options that we discussed:

- 1. Perf and squeeze across the confining zone.
- 2. Demonstrate that PII MI is met by:
 - a) initially a RATS. The pressure at which this test is conducted will establish the MAIP, but the pressure shall not exceed 3073 psi. This will give you the option to lower your cost by running the RATS at a lower pressure.
 - In the future, if a higher MAIP is needed, a new RATS will need to be run at the higher requested pressure. A new SRT will only be required if the MAIP is to exceed 3073 psi.
 - b) subsequent to the initial RATS, annual demonstrations will be required it can be a temperature survey or RATS.
 - c) if RATS chosen in b), a temperature survey is still required every 5 years.

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